

REMARKS

Claims 32-64 are presently pending in the application. Claims 32, 40, and 46 - 60 were amended. Support for the amendment of claim 32 appears, for example, at least at page 5, lines 17 - 24. No new matter has been added. The amendments of claims 40 and 46 - 60 are merely to address a matter of form.

Claims 37 - 42 were objected to under 37 C.F.R. § 1.75 as being substantial duplicates of claims 32 - 36. Applicants have cancelled claim 37 and have amended claims 38 - 42 to ultimately depend from claim 32, thus obviating the rejection.

Claims 32 - 64 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The rejection is respectfully traversed.

As stated above, claim 37 has been cancelled and claim 32 has been amended for clarification. The declarative statement asserted to be new matter by the Examiner has been deleted and replaced by clearer language.

The Office Action further asserts that claim 46 is unclear because it recites the term a "traditional drug discovery strategy." Claim 46 was amended merely to clarify the claim and remove the term "traditional drug discover strategy."

In view thereof, reconsideration and withdrawal of the § 1.75 and § 112 rejections is requested.

Claims 32 - 46, 52 - 55, 59, 63, and 64 were rejected under 35 U.S.C. § 102(e) over Kamb (U.S. Patent No. 5,955,275). The Examiner has maintained the rejections of the previous office action. The rejection is traversed.

Kamb does not teach or suggest, “analyzing the result of expression of the modulated protein by correlating the result of expression of the modified protein to the result of expression of a *corresponding native protein*.”

Rather, as stated in previous responses, Kamb states that use of a certain reporter genes as a surrogate for the phenotype of a cell. See Col. 3, lines 5–31 of the Kamb document. While the reporter construct of Kamb may be an endogenous gene, as stated by the Examiner, **it is introduced into a cell via a construct such that it is stably maintained.** Col. 3, lines 14 – 19. The reporter gene is introduced into the cell in addition to the “perturbagen.” Said in another way, Kamb teaches the introduction of **both a reporter gene and a perturbagen** into a cell for the purpose of identifying components of genetic pathways that regulate traits of interest.

Kamb in no way may be interpreted to anticipate Applicant’s methods, which correlate the result of expression of a modified protein to the result of expression of a corresponding **native** protein directly and do not rely on a reporter gene as a surrogate. Kamb’s reporter gene is not a native protein, but is a gene that is transfected into the cell and is not a native protein as required by the instant claims.

The Examiner’s admission of Kamb’s teaching of the use of a **reporter protein** serves to make Applicant’s point that Kamb does not teach or suggest “analyzing the result of expression of the modulated protein by correlating the result of expression of the modified protein to the result of expression of a corresponding native protein.”

Claims 32 – 34, 36 – 38, 44, 47, 55, 61, and 64 are rejected under 35 USC 102 (b) over Marshall et al (Neuron, vol. 14, 1995). The Examiner asserts that Marshall et al teach that the expression of a chimeric receptor directly result in observable phenotypes. The rejection is traversed.

Marshall et al do not teach or suggest, "analyzing the result of expression of the modulated protein, wherein the result of expression mimics one or more of the effects of the drug candidate compound." The modulated protein of the present invention does not include a reporter gene. In contrast, Marshall et al teach only a method to visualize and or quantify the level of expression of an ion channel fused with a reporter gene that has been transfected into cells.

Neither Kamb nor Marshall, teach each and every element of Applicant's claims and the rejections are properly withdrawn. In this regard, attention is directed to Section 2131 of the Manual of Patent Examining Procedure, which states in part:

A claim is anticipated only if and each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." * * * The identical invention must be shown in as complete detail as is contained in the .. claim."

In view thereof, reconsideration and withdrawal of the rejections are requested.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Date: January , 2005

Customer No.: 21874

Respectfully submitted,



Peter F. Corless (Reg. 33,860)
Stephana E. Patton (Reg. No. 50,373)
EDWARDS & ANGELL, LLP
P.O. Box 55874
Boston, MA 02205
Telephone: 617-439-4444
Facsimile: 617-439-4170